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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,488	10/03/2003	Larry Verne Pederson	44261-15	4569

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EXAMINER	
JOHNSON III, HENRY M	
ART UNIT	**PAPER NUMBER**
3739	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/677,488	PEDERSON ET AL.	
	Examiner	Art Unit	
	Henry M. Johnson, III	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-80,82-96,98-109,111-121,123-130 and 132-143* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-80,82-96,98-109,111-121,123-130 and 132-143* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Note the new rejections are primarily based on applicant's PCT published on 9/20/2001, more than a year prior to the filing of the instant application.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 21 and 136 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,875,225. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are an obvious change in scope with lux ranges within one lux of each other.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-15, 17-26, 29-34, 36-44, 47-55, 58-75, 79-80, 82-91, 94-96, 98-104, 107-109, 111-117, 120-121, 123-126 and 136-143 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/68172 to Pederson et al. The device is disclosed for treating Seasonal Affective Disorder and is capable of emitting light at 2500 lux using LEDs (abstract). It is well known that reducing power to an LED will reduce its intensity, therefore it is capable of lux levels below 2500. White light (predominate wavelengths of 400-600) is produced (page 2, line 18) and a UV filter may be used (page 2, line 24). The energy levels of 0.01 and 0.025 W/m^2 translate to 2.2 lux and 5.5 lux respectively at 500 nanometers. Clearly, the Pederson et al. lux levels are greater than these. The method of use is disclosed as directing into a user's eyes from a distance of from 12 to 24 inches (page 10, lines 25-28) for 15 to 30 minutes. The light may be directed upwards. The device is disclosed as mountable in a number of different manners (seat backs, arm rest, visor, etc). LED's inherently have diverging beams.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/68172 to Pederson et al. LEDs are well known to have divergent beams and are selected for various applications based on a specific beam divergence. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the LEDs best suited to provide the treatment.

Claims 8-9, 16, 27-28, 35, 45-46, 56-57, 76-77, 92-93, 105-106, and 118-119 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/68172 to Pederson et al. as applied to claims 1, 15, 21, 39, 53, 70, 86, 100 and 115 above, and further in view of U.S. Patent 6,350,275 to Vreman et al. Pederson et al. are discussed above, but do not disclose peak wavelengths. Vreman et al. Vreman et al. teach an LED device for treating circadian disorders. The LED's used in the devices produce blue to green light, thereby providing the maximal effect with minimal light intensity and power consumption. LED's based on gallium nitride technology emit light from 420 nm (blue) to 575 nm (green). LED's in this portion of the spectrum can be obtained in various narrow wavelength ranges, each approximately 20 nm-40 nm wide at 50% peak height. Selecting specific wavelength LED's allows for delivery of a narrow spectrum of light with the greatest therapeutic value and the lowest potential side effects. Vreman et al. further teach LED's of different wavelengths can be combined for more effective therapy and that the light intensity can be easily controlled by the number of LED's used and/or the power applied to the LED's. Small LED's of the same or differing wavelengths can be arranged in densely packed arrays to form high intensity light sources. Because LED's

are available with different light delivery angles, the area to be illuminated can be controlled by selecting the most appropriate angle for the application (Col. 4, lines 8-26). Thus Vreman et al. disclose that those of skill in the art are aware of the versatility of the available LEDs including peak intensities at specific wavelengths and would select the appropriate LEDs for the desired treatment. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select LEDs with peaks in the wavelengths known to most impact circadian treatment as known to those in the art.

Claims 127-130 and 132-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/68172 to Pederson et al. in view of U.S. Patent 6,350,275 to Vreman et al. Both are discussed above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select LEDs with peaks in the wavelengths known to most impact circadian treatment as known to those in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,589,741 to Terman et al. teaches a light source for treating disorders that may cap the lux level at 1500 lux. U.S. Patent 6,887,260 to McDaniel teaches wavelengths of 455 to 492 for treating circadian disorders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry M. Johnson, III
Patent Examiner
Art Unit 3739